



U.S. Military Smallpox Vaccination Program

Science – Care – Quality – Confidence

**DHHS Secretary's Council
on Public Health Preparedness**

22 September 2003

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DoD Smallpox Vaccination Program

- Key Points:
 - The decision is about being prepared.
 - Smallpox is contagious, deadly, and would disrupt military missions.
 - Smallpox vaccine is effective, but requires careful use.
 - Our people are our most important asset.
 - This plan is part of our Global War on Terrorism.



DoD Smallpox Vaccination Policy

- Announced by President Bush, 13 Dec 02.
 - Vaccinate troops before an attack to ensure they are personally protected and can continue their missions.
- Stages:
 - Stage 1a: Smallpox Epidemic Response Teams (SERTs).
 - 2,000 to 5,000 people, began mid-Dec 02
 - Stage 1b: Medical Teams for Hospitals & Large Clinics.
 - 10,000 to 25,000 people, began early Jan 03
 - Stage 2: Mission-Critical Forces, especially CENTCOM.
 - About 500,000 troops, began early Jan 03



Precautions in Smallpox Vaccination

- Education up front and throughout process
- Screening for contraindications (same as FDA and ACIP)
- Periodic HIV screening
- Pregnancy screening and testing
- QA of Vaccinator: Evaluate take rates among first cohort of people (e.g., 25, 50) vaccinated by each vaccinator
- Healthcare Workers: Bandages, sleeves, hand-washing, site-evaluation stations
- Military-Unique Settings: No hot-bunking with vaccine exempt
- Documentation: Screening, Vaccination, Take Confirmation, Adverse Events
- Vaccinia immune globulin (VIG) and cidofovir prepositioned around globe, regionally



DoD Smallpox Vaccination Program

as of 11 Sep 03

- Response teams, hospital workers, operational forces
Screened: 565,000 Vaccinated: 492,716
- Primary: 71% Male: 87%
- Exemption rates vary by location:
 - Personal: 5% to 10%
 - Personal + household: 20% to 30%
- Take (3 sites):
 - Primary, 3 jabs: 96%. Revaccination, 15 jabs: 96%
- Adverse Events: Expected temporary symptoms.
 - Sick leave: Average: 1.5 d
 - Hospital staff: 3% Primary--5.5% Revax—1.5%
 - Deployed troops: 0.5%



Symptoms After Smallpox Vaccination

Day 6-8, "Take Check," symptoms since vaccination, n = 526,
Jan-Feb 2003

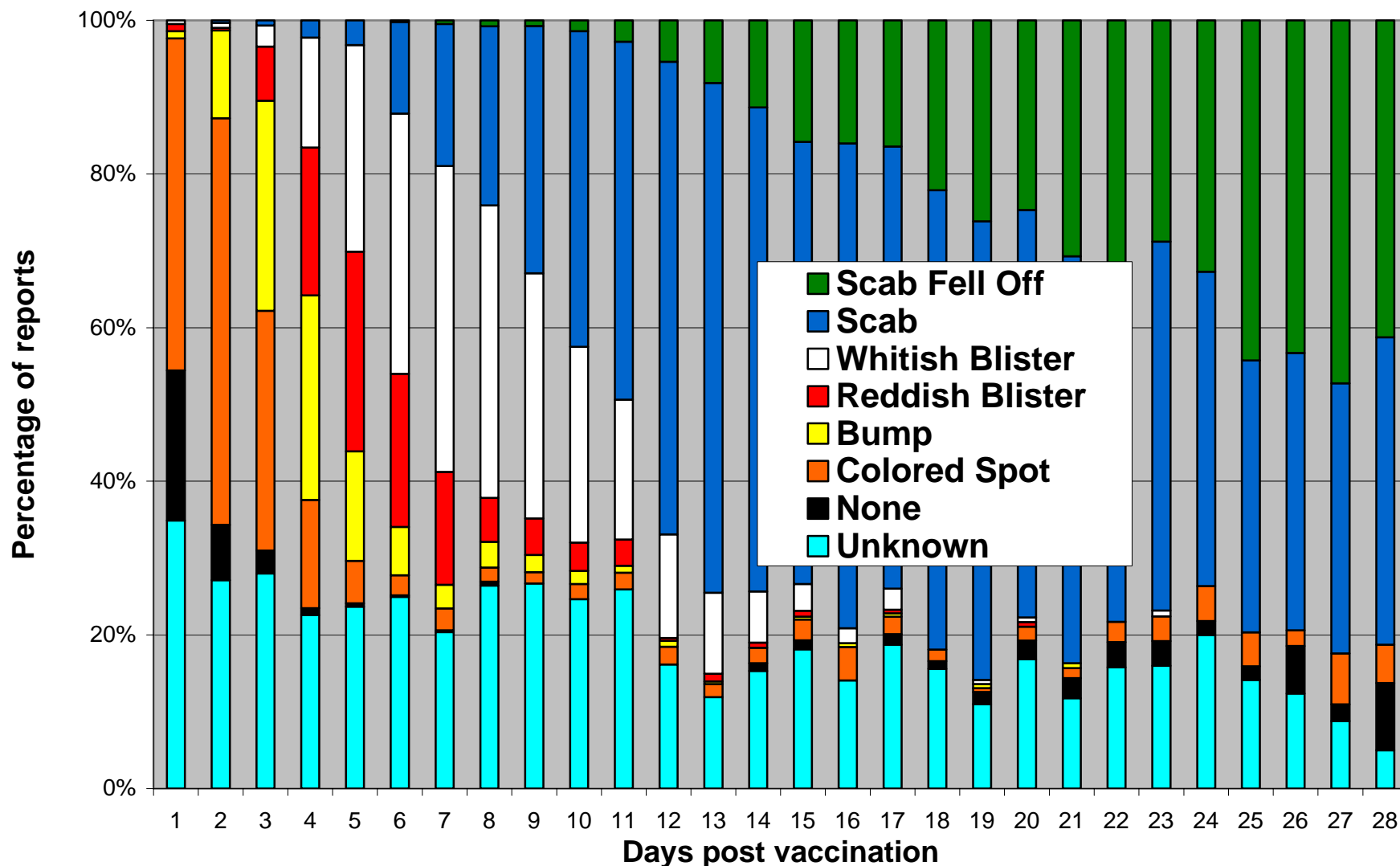
• Local itching	60%	Muscle ache	21%
• Feeling lousy	20%	Lymph nodes swell	14%
• Headache	18%	Bandage reaction	7.4%
• Itchy all over	5.5%	Fever (subjective)	5.3%
• Local rash	5.3%	Body rash	1.1%
• Eye infection	0.0%		
• Restricted activity	1.3%	Took medication	17%
• Outpatient visit	0.8%	Limited duty	0.0%
• Missed work	0.2%	Hospitalized	0.0%



6.3 ± 5.9 reports / person, 4 sites
10.9% female

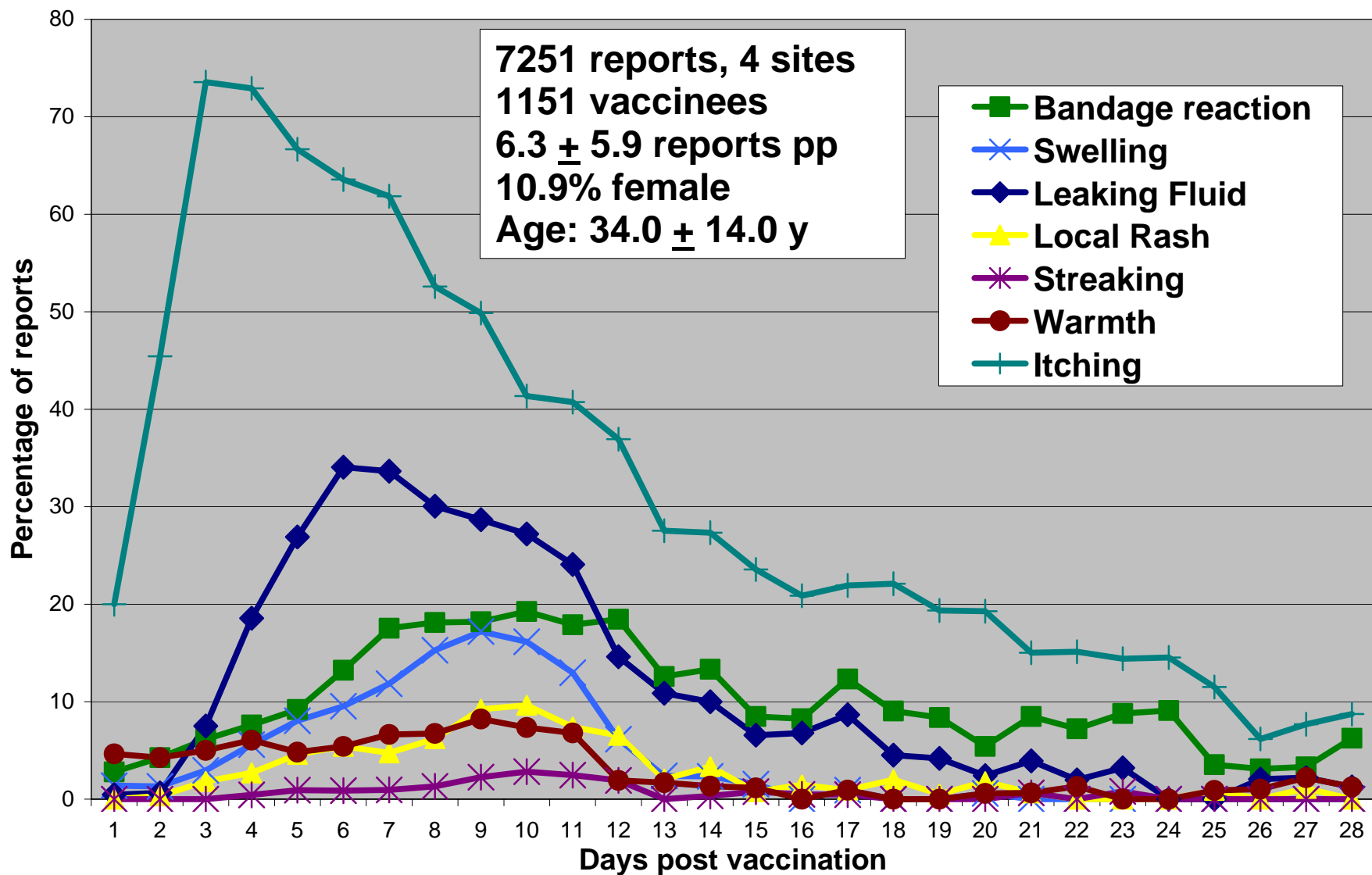
Age: 34.0 \pm 14.0 y

Vaccinee description of vaccination sites - % of reports submitted



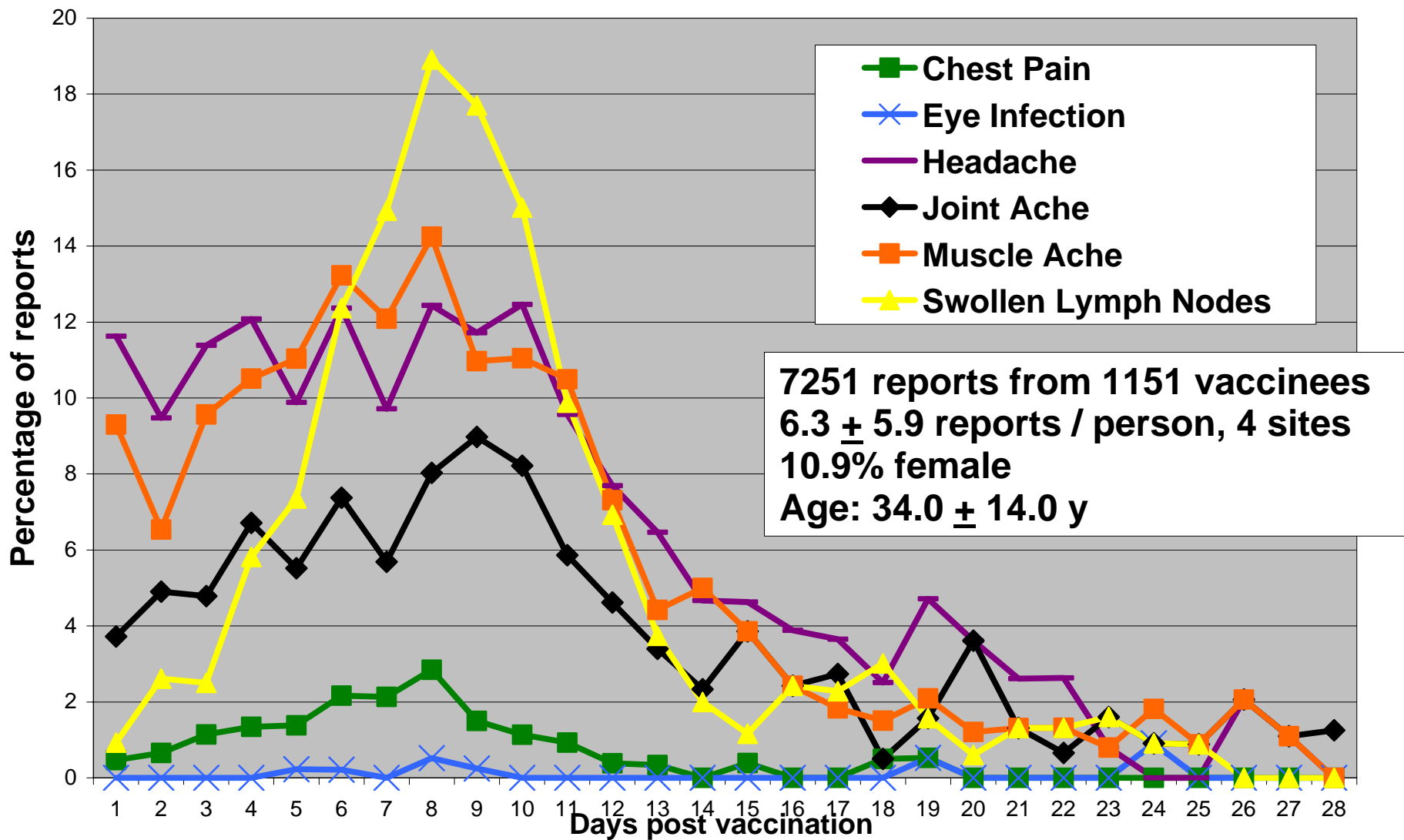


Percentage of reports describing local symptoms





Percentage of reports describing systemic symptoms





DoD Smallpox Vaccination Program

as of 11 Sep 03

- Noteworthy Events among 492,716 Vaccinees:
 - Encephalitis— 1—recovered
 - Generalized vaccinia— 33, all mild, all recovered
 - Inadvertent infection—Skin: Self—48, Contact—27
 - Inadvertent infection—Eye: Self—11, Contact— 2
 - Contact transfer:
 - Family—14, intimate contact—7, friend—8, patient—0
 - Vaccinia Immune Globulin (VIG) treatments: Burn-1, eye-1
 - Myo-pericarditis: Suspect—0, probable—54, confirmed—2
 - Eczema vaccinatum: zero Progressive vaccinia: zero
 - Deaths: Attributed to vaccine: 0 Not attributed to vaccine: 3

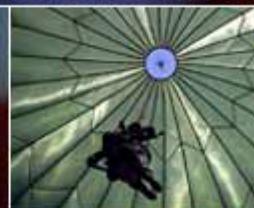


Vaccinia Lessons Learned

- Careful screening reduces adverse events $<$ or $=$ 1960s levels.
 - VIG needed less frequently than expected.
- Education and screening are rate-limiting steps.
- 3 or 15 jabs yield high “take” rates.
- Clinicians ‘alarmed’ by first (maculopapular) rashes they saw in vaccinees; lessened with experience.
- Secondary spread of vaccinia: Bed partners, fail to bandage.
- Myo-pericarditis greater risk than anticipated, principally male, primary vaccinees. High recovery rate.

[THE DANGER](#)[THE VACCINE](#)[THE PRIORITY](#)[THE STRATEGY](#)[adverse event info](#)[education toolkit](#)[resource center](#)

SMALLPOX VACCINATION PROGRAM

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- Smallpox is contagious, deadly, and would disrupt military missions.
- Smallpox vaccine prevents smallpox and we will use it carefully.
- Preserving the health and safety of our people is our top concern.
- The Defense Department's smallpox vaccination program is part of our national strategy to safeguard Americans against smallpox attack.

MIL VAX[Program](#) [SVP Online Proficiency Training](#) [DoD's Smallpox Vaccination Lessons Learned](#) [MMWR-Vaccinia Adverse Reactions](#)[Security Notice and External Link Disclaimer](#)

Last Updated 01/27/2003